ABSTRACT

A computer system reroutes a configuration cycle intended for an unused system bus address line to the IDSEL, or equivalent, configuration chip select input pin of a device which uses the same system bus address line as another device on the system bus. The computer system has a PCI bus to which a programmable logic device and an electronically-controlled switch are connected. The programmable logic device detects PCI bus configuration cycles associated with a PCI bus AD line that is otherwise unused as a chip select during configuration cycles. When the logic device detects a configuration cycle associated with the unused AD line, the logic device asserts a control signal to the electronically-controlled switch. The switch then connects the previously unused AD line to the AD line that is connected to the IDSEL input pin of the PCI device that experiences the conflict. The PCI device then effectively responds to the configuration read or write cycle as if its IDSEL input pin was hardwired to the switched AD line.